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10/766,652	01/27/2004	Younger Ahluwalia	03398.000004.	3967
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* YOUNGER AHLUWALIA,  
MATTI KIIK, and THOMAS D. KAROL

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Appeal 2010-003182  
Application 10/766,652  
Technology Center 1700

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Before CHARLES F. WARREN, JEFFREY T. SMITH, and  
KAREN M. HASTINGS, *Administrative Patent Judges*.

WARREN, *Administrative Patent Judge*.

DECISION ON APPEAL<sup>1</sup>

Applicants appeal to the Board from the decision of the Primary Examiner finally rejecting claims 1-19 in the Office Action mailed November 12, 2008. 35 U.S.C. §§ 6 and 134(a) (2002); 37 C.F.R.

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

§ 41.31(a) (2008).

An oral hearing was held January 12, 2011.

We reverse the decision of the Primary Examiner.

Claim 1 illustrates Appellants' invention of a heat insulating and fire resistant composite material, and is representative of the claims on appeal:

1. A heat insulating and fire resistant composite material comprising:

- (a) a substrate having an ionic charge;
- (b) a coating which coats the substrate having essentially the same ionic charge; and

- (c) a metallic component adhered to the coated substrate

wherein said coating consists essentially of a filler material comprising clay and a binder material, and wherein said binder material bonds the filler material together and to the substrate and wherein said coating does not bleed through the substrate.

Appellants request review of the ground of rejection under 35 U.S.C. § 103(a) advanced on appeal by the Examiner: claims 1-19 over Ahluwalia (US 5,965,257) in view of Langer (US 4,600,634) and Weaver (GB 2 167 060 A) or Dugan (US 4,994,317) or Dombeck (US 6,228,497 B1).  
App. Br. 4; Ans. 3.

### Opinion

#### I.

Appellants submit that the Examiner erred in concluding that the combined teachings of Ahluwalia, Langer, Weaver, Dugan, and Dombeck would have led one of ordinary skill in the art to the claimed heat insulating and fire resistant composite material specified in representative claim 1. Appellants argue, among other things, that the Examiner did not establish that the prior art relied on would have led one of ordinary skill in the art to

use clay as a filler in a coating which can contain other fillers and contains binder material for the filler and the substrate, in the expectation that the addition of clay would result in a coating having essentially the same ionic charge as the substrate such that the “coating does not bleed through said substrate” as claimed.<sup>2</sup> App. Br. e.g., 11-13 and 15-21; Reply Br. 3-6.

## II.

The Examiner submits that a difference between the coated structural articles of Ahluwalia is the absence of clay filler. The Examiner finds that Ahluwalia’s articles have a substrate, such as fiberglass, coated with a coating containing a filler and a binder that has essentially the same ionic charge as the substrate, and can be used for, among other things, a fire wall and facing sheets. Ans. 3-4. The Examiner finds that Weaver, Dugan, and Dombeck would have disclosed to one of ordinary skill in the art that clay filler provides increased fire resistance in composite materials for heat insulating and fire resistance. Ans. 5. Thus, the Examiner concludes that it would have been obvious to one of ordinary skill in the art to add clay filler to Ahluwalia’s coating for increased flame resistance and maintains this position in response to Appellants’ position in the Appeal Brief. Ans. 5, 6, and 7.

## III.

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<sup>2</sup> Appellants argued this difference between the claimed composite materials and Ahluwalia’s composite materials, stating that “Applicants respectfully submit that, whether it would have been obvious to add Langer’s aluminum sheet to the coated substrate of Ahluwalia ‘257 is irrelevant to the issue of patentability of the instant claimed invention.” App. Br. 15.

We agree with Appellants. On this record, the Examiner has not established that one of ordinary skill in the art would have reasonably predicted that any clay that can function as an endothermic filler for fire resistant composites as disclosed by Weaver, Dugan, and Dombeck, can be used as a filler in Ahluwalia's coatings, consisting essentially of any filler material and a binder material, on a substrate, wherein the coating must have essentially the same ionic charge as the substrate in order that the coating does not bleed through to the other side of the substrate when applied thereto.<sup>3</sup> See Ahluwalia, e.g., abstract, col. 1, l. 66 to col. 2, l. 27, col. 3, ll. 41-43, col. 4, ll. 26-46, col. 5, ll. 19-24 and 39-50, col. 6, ll. 5-13, and col. 8, l. 61 to col. 9, l. 9; Weaver, e.g., abstract, 1:116-117, 2:5-63, 2:93-123, 3:2-11, 3:70-78, 4:15-21, and Fig. 2; Dugan, e.g., abstract, col. 1, ll. 47-64, col. 2, ll. 24-37, col. 3, ll. 10-18 and 58-65; Dombeck, e.g., abstract, col. 1, ll. 19-21, col. 2, ll. 31-54, col. 2, l. 64 to col. 3, l. 21, col. 3, ll. 52-64, col. 4, ll. 27-36, and col. 5, ll. 4-19 and 25-28; *see also* Langer, e.g., col. 2, ll. 5-32 and 53-49, col. 3, ll. 3-9, and col. 3, l. 61 to col. 4, l. 7. Indeed, the Examiner has not shown that the clay fillers of Weaver, Dugan, and Dombeck would be compatible with an anionic coating composition containing, for example, Ahluwalia's preferred "high performance

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<sup>3</sup> In this respect, Ahluwalia's disclosure aligns with the limitation "coating does not bleed through said substrate" of claim 1. Indeed, we interpret this limitation of claim 1 in light of the Specification as specifying that when the coating composition is applied to one side of at least one substrate which has essentially the same ionic charge, the coating coats the substrate and does "not bleed through to the other side" of the substrate. Spec., e.g., ¶¶ 0032 and 0047.

heat-reactive acrylic latex polymer” Hycar<sup>TM</sup> 2679, which is anionic in water, when applied to a fiberglass mat that is also anionic. Ahluwalia discloses that Hycar<sup>TM</sup> 2679 is compatible with a range of fillers having different ionic charges. Ahluwalia, e.g., col. 3, ll. 5-9, col. 5, ll. 39-50, col. 7, ll. 9-24, col. 8, ll. 43-45, and col. 8, ll. 65-67. We fail to find in Ahluwalia any limitation(s) on the fillers employed other than the coatings containing the same must comply with the “principals [sic] underlying the present invention.” Ahluwalia, e.g., col. 9, ll. 41-46.

#### IV.

Accordingly, the Examiner has not in the first instance provided on the record evidence or a scientific explanation establishing that one of ordinary skill in the art would have modified Ahluwalia’s composite articles by using clay as a filler in the coating thereon as disclosed by the teachings of Weaver, Dombeck, and Dugan. Thus, in the absence of a case of obviousness, we reverse the ground of rejection of claims 1-19 under 35 U.S.C. § 103(a). *See, e.g., In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992); *see also KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (“[I]t can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.”).

The Primary Examiner’s decision is reversed.

REVERSED

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Appeal 2010-003182  
Application 10/766,652

FITZPATRICK CELLA HARPER & SCINTO  
1290 AVENUE OF THE AMERICAS  
NEW YORK, NY 10104-3800